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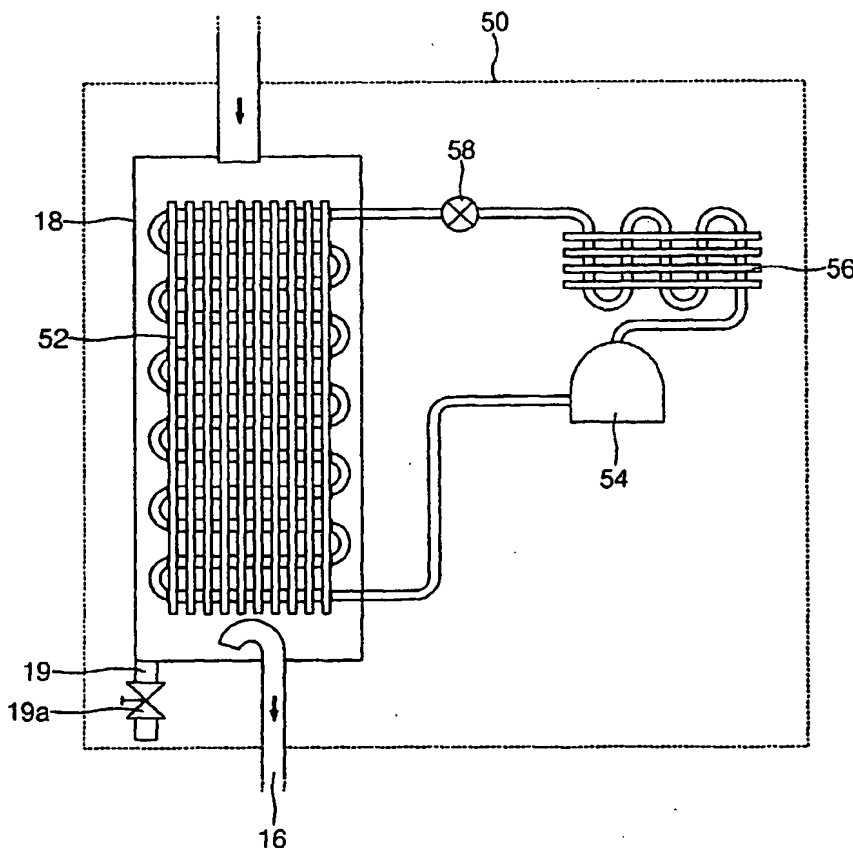
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(54) Title: PLASMA STERILIZER HAVING DEHUMIDIFIER



(57) Abstract: Disclosed is a dehumidifier-equipped plasma sterilization apparatus having a sterilization chamber (10) for receiving therein a sterilization object (11); a high frequency power source (40), connected to a cathode, for generating plasma in optimal condition under control of both an impedance matching controller (42) and an impedance matching circuit (44), the cathode being installed, along with an anode at a predetermined distance, in the sterilization chamber; a vacuum pump (14), connected through an exhaust pipe (16) to the sterilization chamber (10) to form a vacuum state in the sterilization chamber (10); and a dehumidifier (50), mounted on the exhaust pipe (16) for freeze-condensing the water vapor of the gas flowing through the exhaust pipe. In the apparatus, water vapor remaining in the mixed gas used for sterilizing the sterilization object is frozen and removed so that it does not enter the vacuum pump.

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